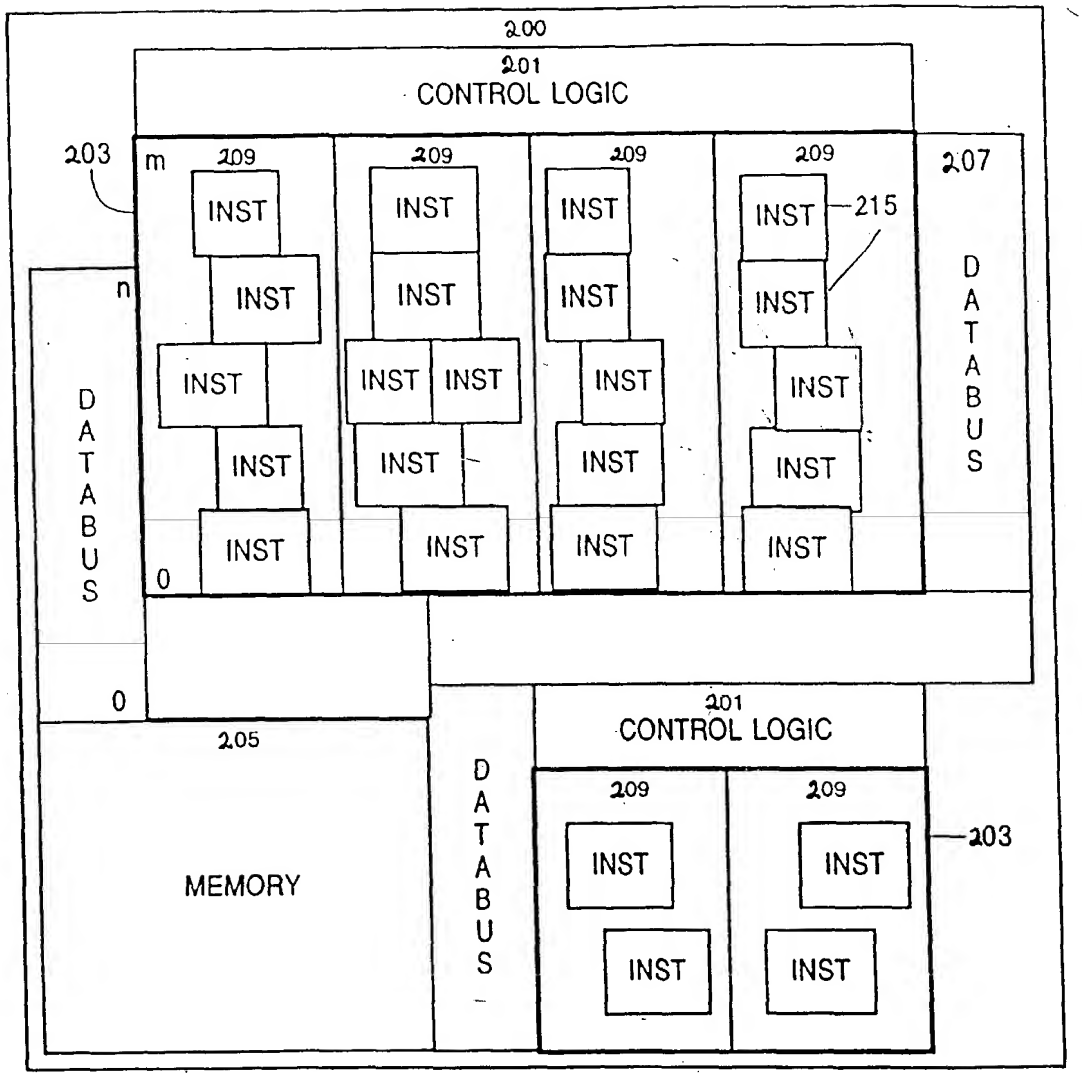
200
201
CONTROL LOGIC
203
m
209
INST
215
207
DATABUS
n
0
205
MEMORY
201
CONTROL LOGIC
203

FIGURE 2

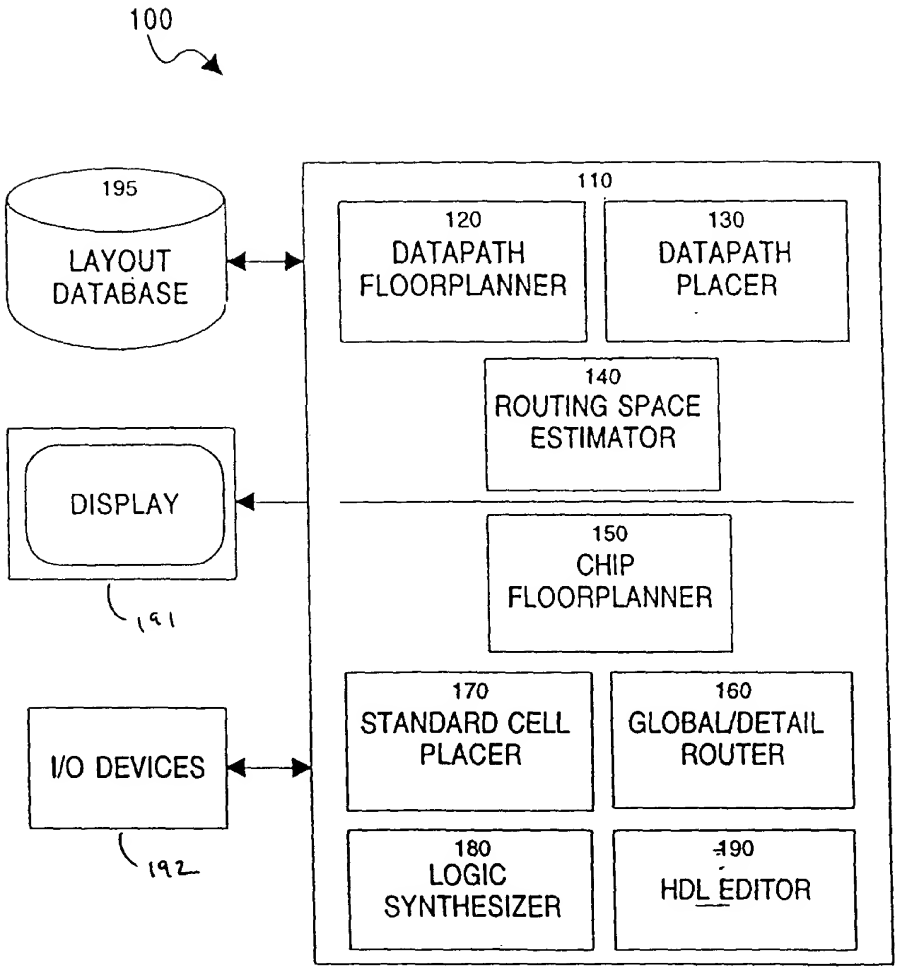
100
195
LAYOUT DATABASE
110
120
DATAPATH FLOORPLANNER
130
DATAPATH PLACER
140
ROUTING SPACE ESTIMATOR
DISPLAY
191
150
CHIP FLOORPLANNER
170
STANDARD CELL PLACER
160
GLOBAL/DETAIL ROUTER
I/O DEVICES
192
180
LOGIC SYNTHESIZER
190
HDL EDITOR

FIGURE 1

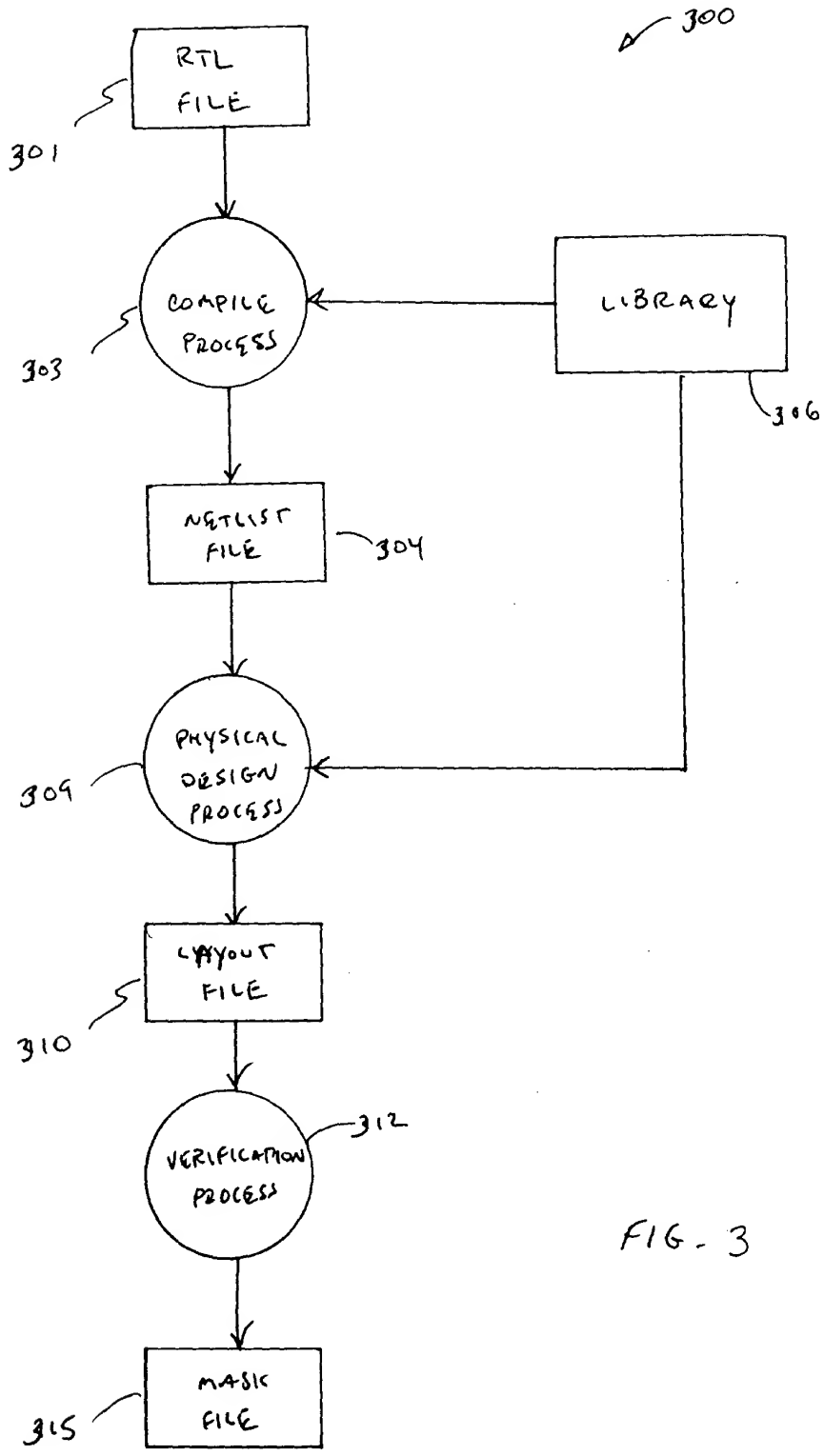
300
RTL FILE
301
COMPILE PROCESS
303
LIBRARY
306
NETLIST FILE
304
PHYSICAL DESIGN PROCESS
309
LAYOUT FILE
310
VERIFICATION PROCESS
312
MASK FILE
315

FIG. 3

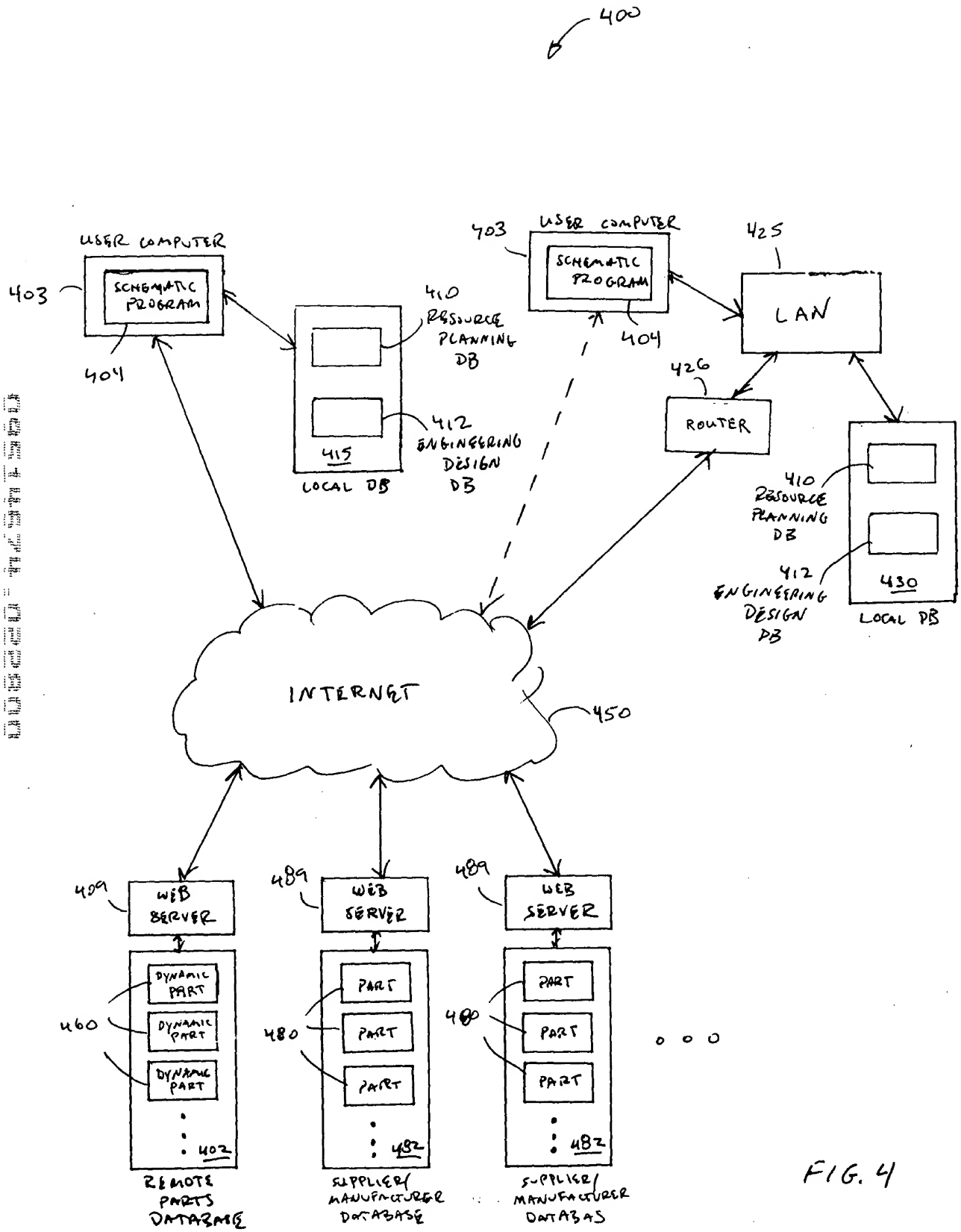
400
USER COMPUTER
403
SCHEMATIC PROGRAM
404
410
RESOURCE PLANNING DB
412
ENGINEERING DESIGN DB
415
LOCAL DB
403
USER COMPUTER
SCHEMATIC PROGRAM
404
425
LAN
426
ROUTER
410
RESOURCE PLANNING DB
412
ENGINEERING DESIGN DB
430
LOCAL DB
INTERNET
450
409
WEB SERVER
DYNAMIC PART
DYNAMIC PART
DYNAMIC PART
460
402
REMOTE PARTS DATABASE
489
WEB SERVER
PART
PART
PART
480
482
SUPPLIER/ MANUFACTURER DATABASE
489
WEB SERVER
PART
PART
PART
480
482
SUPPLIER/ MANUFACTURER DATABASE
o o o

FIG. 4

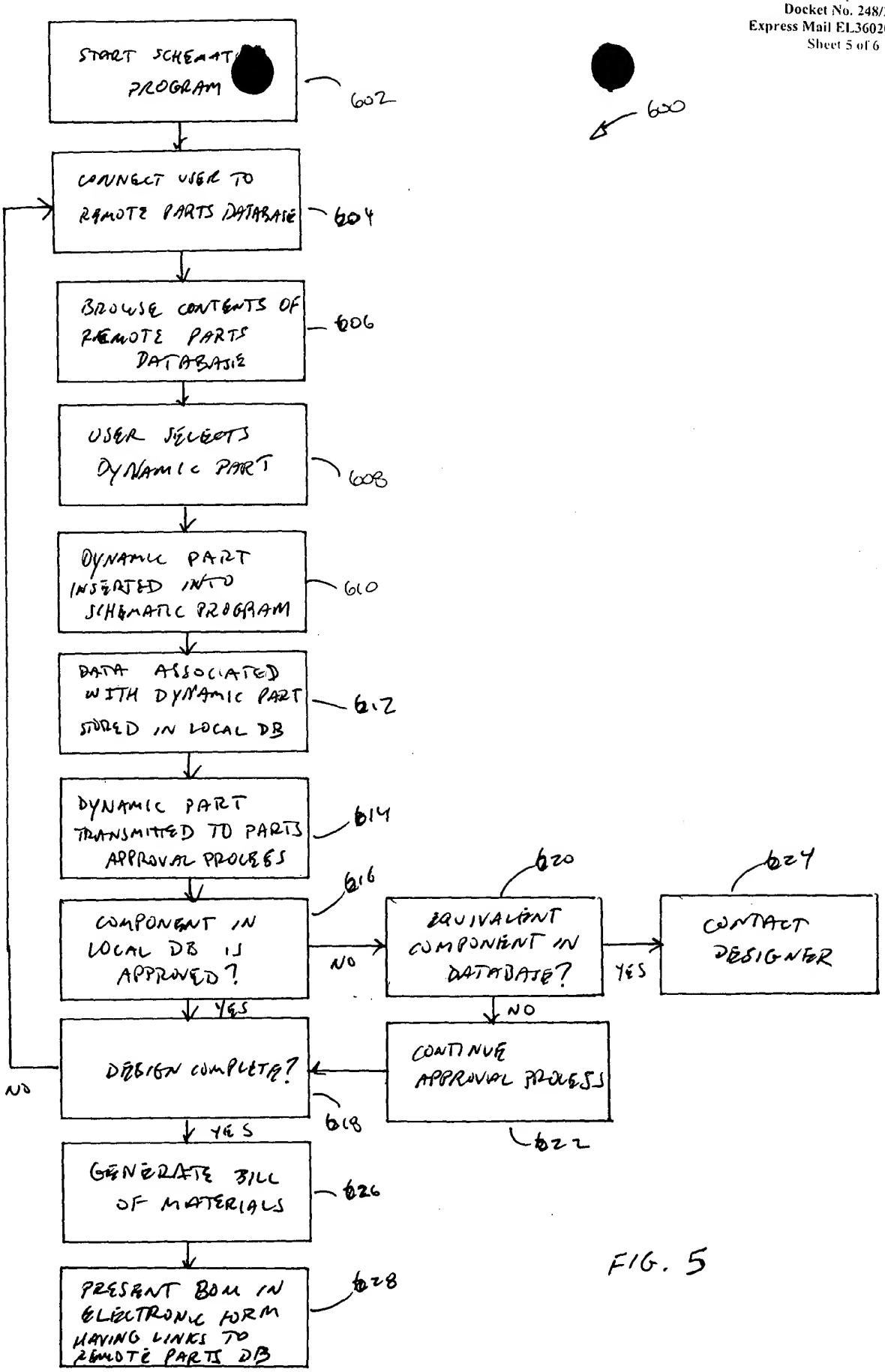
START SCHEMATIC PROGRAM
602
600
CONNECT USER TO REMOTE PARTS DATABASE
604
BROWSE CONTENTS OF REMOTE PARTS DATABASE
606
USER SELECTS DYNAMIC PART
608
DYNAMIC PART INSERTED INTO SCHEMATIC PROGRAM
610
DATA ASSOCIATED WITH DYNAMIC PART STORED IN LOCAL DB
612
DYNAMIC PART TRANSMITTED TO PARTS APPROVAL PROCESS
614
COMPONENT IN LOCAL DB IS APPROVED?
616
NO
EQUIVALENT COMPONENT IN DATABASE?
620
YES
CONTACT DESIGNER
624
YES
NO
DESIGN COMPLETE?
618
NO
CONTINUE APPROVAL PROCESS
622
YES
GENERATE BILL OF MATERIALS
626
PRESENT BOM IN ELECTRONIC FORM HAVING LINKS TO REMOTE PARTS DB
628

FIG. 5

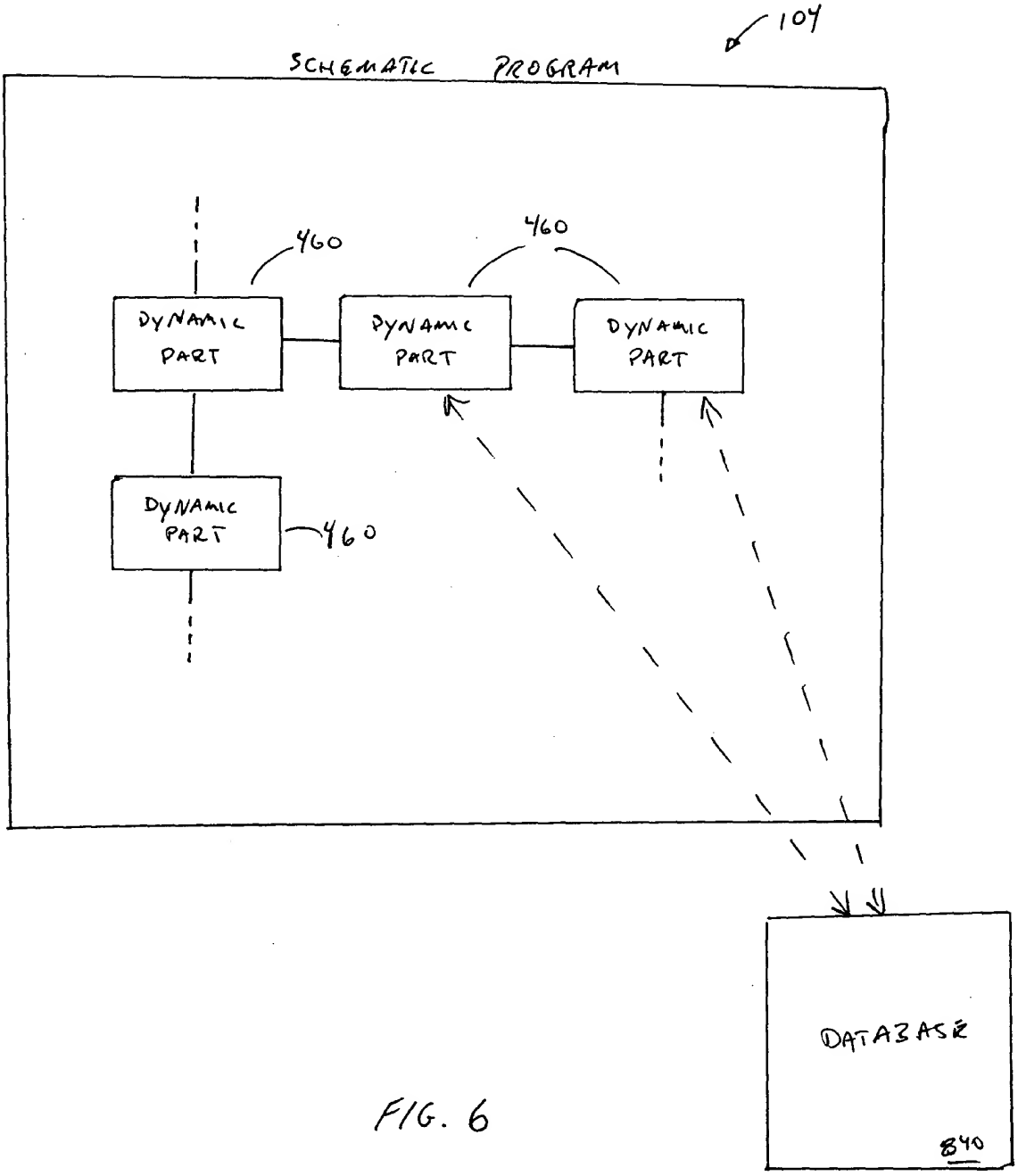
104
SCHEMATIC PROGRAM
460
460
DYNAMIC PART
DYNAMIC PART
DYNAMIC PART
DYNAMIC PART
460
DATABASE
840

FIG. 6